APPENDIX OF CLAIMS

1. A data carrier having a semiconductor chip (5) with at least one memory containing an operating program which is able to execute at least one operation *(h)*, the execution of the operation *(h)* requiring input data *(x)* and the execution of the operation *(h)* generating output data *(y)*, characterized in that

the operation *(h)* is disguised before its execution,

the disguised operation (h_{R1}) is executed with disguised input data $(x \otimes R_1)$, and

the disguising of the operation *(h)* and the input data *(x)* is coordinated such that the execution of the disguised operation (h_{R1}) with disguised input data $(x \otimes R_1)$ yields output data *(y)* identical with the output data *(y)* determined upon execution of the undisguised operation *(h)* with undisguised input data *(x)*.

2. A data carrier according to claim 1, characterized in that at least one random number (R_1) enters into the determination of the disguised operation (h_{R1}) and the disguised input data $(x \otimes R_1)$.

3(amended). A data carrier according to claim 1, characterized in that the determination of the disguised operation (h_{R1}) and the disguised input data $(x \otimes R_1)$ is effected with the aid of EXOR operations.

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4(amended). A data carrier according to claim 1, characterized in that the disguised operation (h_{R1}) is permanently stored in the data carrier in advance.

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5. A data carrier according to claim 4, characterized in that at least two disguised operations $(h_{R1}, h_{R1'})$ are permanently stored in the data carrier in advance

and one of the stored disguised operations (h_{R1}, $h_{R1'}$) is selected randomly when a disguised operation is to be executed.

6(amended). A data carrier according to claim 1, characterized in that the disguised operation (h_{R1}) is recalculated before its execution and the at least one random number (R_1) is redetermined for said calculation.

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7(amended). A data carrier according to claim 1, characterized in that the operation *(h)* is realized by a table stored in the data carrier which establishes an association between the input data *(x)* and the output data *(y)*.

8. A data carrier according to claim 7, characterized in that the disguising of the input data *(x)* contained in the table is effected by combination with the at least one random number (R_1).

9. A data carrier having a semiconductor chip (5) with at least one memory containing an operating program which is able to execute at least one operation *(h)*, the execution of the operation *(h)* requiring input data *(x)* and the execution of the operation *(h)* generating output data *(y)*, characterized in that

the operation *(h)* is disguised before its execution,

the disguised operation (h_{R1}) is executed with disguised input data ($x \otimes R_1$),

the disguising of the operation *(h)* and the input data *(x)* is coordinated such that the execution of the disguised operation (h_{R1R2}) with disguised input data ($x \otimes R_1$) yields output data ($y \otimes R_2$) which are disguised relative to the output data *(y)* determined upon execution of the undisguised operation *(h)* with undisguised input data (x), and

the undisguised output data *(y)* can be determined from the disguised output data *($y \otimes R_2$)* with the aid of data *(R_2)* used for disguising the operation *(h)*.

10. A data carrier according to claim 9, characterized in that at least one random number (R_1) enters into the determination of the disguised input data *($x \otimes R_1$)* and at least two random numbers *(R_1, R_2)* enter into the determination of the disguised operations *(h_{R1R2})*.

11(amended). A data carrier according to claim 9, characterized in that the determination of the disguised operation *(h_{R1R2})* and the disguised input data *($x \otimes R_1$)* is effected with the aid of EXOR operations.

12(amended). A data carrier according to claim 9, characterized in that the disguised operation *(h_{R1R2})* is permanently stored in the data carrier in advance.

13. A data carrier according to claim 12, characterized in that at least two disguised operations *(h_{R1R2}, $h_{R1'R2'}$)* are permanently stored in the data carrier in advance and one of the stored disguised operations *(h_{R1R2}, $h_{R1'R2'}$)* is selected randomly when a disguised operation is to be executed.

14. A data carrier according to claim 13, characterized in that the random numbers *(R_1, R_2)* for determining the first disguised operation *(h_{R1R2})* are inverse to the random numbers *(R_1', R_2')* for determining the second disguised operation *($h_{R1'R2'}$)* with respect to the combination used for determining the disguised operations *(h_{R1R2}, $h_{R1'R2'}$)*.

15(amended). A data carrier according to claim 9, characterized in that the disguised operation *(h_{R1R2})* is recalculated before its execution and the random numbers *(R_1, R_2)* are redetermined for said calculation.

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16(amended). A data carrier according to claim 9, characterized in that the operation *(h)* is realized by a table stored in the data carrier which establishes an association between the input data *(x)* and the output data *(y)*.

17. A data carrier according to claim 16, characterized in that the disguising of the input data *(x)* contained in the table is effected by combination with the at least one random number (R_1) and the disguising of the output data *(y)* contained in the table is effected by combination with the at least one further random number (R_2).

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18(amended). A data carrier according to claim 1, characterized in that the operation *(h)* is a nonlinear operation with respect to the combination used for disguising the operation *(h)*.

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